

REMARKS

This amendment is submitted in response to the Examiner's Action dated January 4, 2005, in which Examiner re-opened prosecution following the filing of Applicants' Appeal Brief. Applicants have amended the claims to more clearly recite key features of the invention. No new matter has been added, and the amendments place the claims in better condition for allowance. Applicants respectfully request entry of the amendments to the claims. The discussion/arguments provided below reference the claims in their amended form.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

In the present Office Action, Claims 1-3 and 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chiussi, et al.* (U.S. Patent No. 6,396,843) in view of *Hughes, et al.* (U.S. Patent No. 5,835,494). The combination of these references does not render Applicants' claims unpatentable because the combination does not suggest key features recited by Applicants' claims, and those features would not have been obvious to one skilled in the art at the time of Applicants' invention.

Applicants' invention is described within the specification and summarized by the description of the invention provided within the Appeal Brief. As recited by the independent claims, Applicants' invention provides the following features (among others):

a mechanism for determining when a flow is added to the source whether that source was at a location in the time-based calendar and preventing the source from being placed at a location ahead of a calculated location in the time-based calendar and placing the source at a second location that is the calculated location or a next location that is after the calculated location within the time-based calendar (system Claims 1 and 6).

Chiussi generally provides a "Logarithmic Calendar Queue (LCQ)" that sorts "timestamps in order to select the packet with minimum timestamp for transmissions" in "a GPS-related scheduler" (Abstract). Examiner has either misconstrued or simply mischaracterized what is taught by the referenced sections of *Chiussi*. For example, Col. 4, lines 37-45 discusses "MD-SCFQ achieves optimal delay bounds" and "using the system-potential function of

MDSCFQ." Col. 5, lines 17-30 describes ordering bins based on position within memory, with each bin storing an associated timestamp. Col. 10, lines 50-53 provides a "network connection is established from each of the data sources ... and data packets are transmitted..." Finally, col. 15, lines 53-65 describes "receiving a plurality of data packets" and "storing ... packets in one of said plurality of queues."

None of these sections teach or suggest the specific feature of Applicants' claim that the section is cited to reject, namely "a time-independent calendar" that places each source in a second calendar location that is the later of (1) a second calculated location calculated after the source is first serviced or a location after that second calculated location. Notably also, Examiner recognizes that "*Chiussi* does not specifically teach the use of adding a queue." Examiner, however, makes this statement and then never actually provides a reference that supports the rejection of this feature of Applicants' claimed invention.

With respect to *Hughes*, Examiner relies on sections of *Hughes*, which sections also do not actually teach or suggest the specific feature of Applicants' claims for which the sections are cited to reject. For example, Col. 11, lines 6-13 describes updating and storing a pointer in an entry 240 that points to an entry 222 when a VC1 is added to a cell slot linked list. Col. 4, lines 53-57 describes many service queues each having a certain priority, where connections queued in lower priority queues are serviced only after higher priority queues are empty. Finally col. 15, lines 19-50 describe cell slots holding a plurality of entries in two different calendars, each calendar having a predetermined interval after each cell slot associated with an entry. That section also provides "determining a cell slot for the virtual connection." However, the section provides no information on how the cell slot is determined, and one skilled in the art would recognize that a statement that a cell slot is determined for a virtual connection is not synonymous with or suggestive of the specific method of selecting a calendar location to avoid a source from being queued too early in a time-based calendar.

Examiner's mischaracterization of the two references is further magnified by the conclusions reached by Examiner, who states that combining the teachings "would have been obvious ... because *Hughes* method of adding new queues to the correct calendar would make *Chussi's* (*sic*) calendar system more adaptable and efficient." While this statement may be true,

it also shows that the combination touted by Examiner is inherently different and not suggestive of the system/features provided by Applicants' claims.

Independent method claims each provide a series of steps, including:

determining whether a new position ... is earlier than a previously calculated new position ...; if the new position ... is earlier ..., using the previously calculated new position; and, if the previously calculated new position is not earlier ... using the position which would be assigned (Claim 4); and

identifying a second location whereat the queue would have been re-attached had it not gone empty; ...if ... queue is not empty, identifying a current location ...; correlating the current location of the time pointer and the second location; and selecting a location which is not earlier than the second location to re-attach the queue (Claim 10).

Examiner again misconstrues and/or mischaracterizes what is taught by *Chiussi* and *Hughes* with respect to the features recited by the independent method claims. For example, col. 4, lines 53-57 and col. 15, lines 19-50 of *Hughes* do not teach or suggest the above determining step of Applicants' claims. The features provided by col. 4, lines 53-57 and col. 15, lines 19-50 were described above. Both references are devoid of any step that involves (1) determining whether a current new position is earlier than a previously calculated position and/or (2) identifying a second location ... and selecting a location which is not earlier than the second location.

Further, col. 10, lines 46-55 does not teach or suggest using a previously calculated new position under the specific scenarios described by Applicants' claims. That is, that section provides no selection from among two possible positions within the calendar. Rather, col. 10, lines 46-55 describes utilizing the "calendar entry that corresponds to the new desired service time value" without consideration of any previously calculated time value. Col. 11, lines 44-48 also does not teach or suggest selecting a location that is not earlier than the second location. Rather, that section states: "when connection queue 20-I is empty ..., the timestamp of connection I is the timestamp of the last transmitted packet of connection i." This section of *Hughes* provides an implementation involving the precise problem overcome by Applicants'

claimed invention. That is, *Hughes* fails to prevent the early re-scheduling of queues (which is described in Applicants' background), and thus *Hughes* implements the very limitation of the prior art that Applicants' invention is designed to eliminate.

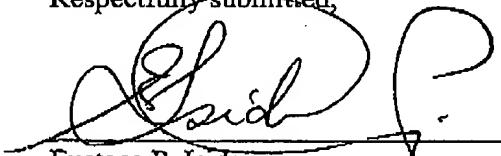
Given the above reasons, it is clear that the combination of references does not suggest key features of Applicants' invention. One skilled in the art would not find Applicants' invention unpatentable over the combination of references, and the claims are therefore allowable over the combination.

CONCLUSION

Applicants have diligently responded to the Office Action by amending the claims to clarify features within specific claims. Applicants have also provided arguments that show why the claims are allowable over references and combinations thereof. Since the amendments overcome the § 103 rejections, Applicants, respectfully request issuance of a Notice of Allowance for all claims now pending.

Applicants further respectfully request the Examiner contact the undersigned attorney of record at 512.343.6116 if such would further or expedite the prosecution of the present Application.

Respectfully submitted,



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